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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 10/16/2009 have been fully considered but they are not persuasive.

On pages 10-11, Applicant argues that,

“... Kori et al. does not disclose that a plurality of pieces of copy control information indicate different restrictions to be imposed on recording of a video signal depending on the quality levels of the video signal output.

Furthermore, Kori et al. discloses that the levels of restrictions to be imposed are determined depending on whether the target recording medium is configured to allow high-rate copying, rather than on the quality of image signals as addressed by the present invention. Thus, Kori et al. cannot be relied upon to reject the novelty of the present invention.”

In response, Examiner respectfully disagrees. First of all, let's take claim 1 for example. Claim 1 recites "... the restrictions differing depending on quality levels at which the video signal is output."

Examiner respectfully submits that the limitation of "quality" as recited in the claim carries a relative meaning and can be evaluated using various measurements, one of which obviously can be the number of bits of the image signal being outputted per a unit of time. In other words, the "quality levels at which the video signal is output" can be evaluated by either "high rate" or "low rate" at which the copied image signals are outputted as disclosed by Kori since nowhere in the claim, an understanding of "quality levels" as "visual quality levels" or "display quality levels" is required.

Similarly, claim 2 recites "a resolution level of the frame images". Examiner respectfully submits that the "high rate" or "low rate" at which the copied image signals are outputted as disclosed by Kori reads on this limitation because the rate disclosed by Kori is measured by the number of bits per second. As such, it is a "temporal resolution". Nowhere in the claim requires the recited "resolution" be understood as the dimension or size in terms of pixels for each frame.

Applicant's arguments therefore are not persuasive.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2621

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kori et al. (US 2004/0028385 - hereinafter Kori).

Regarding claim 1, Kori discloses a computer readable recording medium comprising: a video stream ([0182]); and a plurality of pieces of copy control information ([0013]; [0014]; [0187]; [0188]; [0191]; [0334]; [0326]; [0338]), wherein the video stream contains video composed of a plurality of frame images ([0182] – *the video signal is inherently composed of a plurality of frame images*), and the plurality of pieces of copy control information indicates different restrictions on recording of a video signal that is converted from the frame images ([0182] – *the video signal is inherently composed of a plurality of frame images*; [0187]; [0188]; [0191]; Fig. 8; [0192]; [0193]; [0326]; [0334]; [0338]), the restrictions differing depending on quality levels at which the video signal is output ([0192]; [0193]; [0197]; [0326]; [0334]; [0338] – *SCMS or CGMS is used for normal rate copying – UCS is used for high rate copying – wherein copying rates reflect quality levels at which the video signal is output*).

Regarding claim 2, Kori also discloses each quality level shows a resolution level of the frame images represented by the video signal ([0192]; [0193]; [0197] – *wherein copying rates reflect quality levels at which the video signal is output that show temporal resolution levels of the frame images to be copied, which is a resolution level*), and the copy control information corresponding to a low-resolution level indicates less strict

Art Unit: 2621

restriction than restriction indicated by the copy control information corresponding to a high-resolution level ([0188]; [0191]; Fig. 8; [0192]; [0193]; [0326]; [0326]; [0334]; [0338] – SCMS or CGMS is used for low rate copying, which is a temporally low resolution level - UCS is used for high rate copying, which is a temporally high resolution level - as disclosed SCMS or CGMS is less restrictive than UCS).

Regarding claim 3, Kori also discloses the copy control information corresponding to the low-resolution level indicates permission to record the video signal only a single time ([0008] – state of “10” of CGMS indicates permission to record the video signal only a single time).

Regarding claim 4, Kori also discloses a plurality of video streams ([0182] – wherein the video signal can be arbitrarily divided into a plurality of video streams) each piece of copy control information indicates a restriction on recording of a video signal resulting from playback of one of the video streams ([0188]; [0191]; Fig. 8; [0192]; [0193]; [0326]; [0326]; [0334]; [0338]).

Regarding claim 5, Kori also discloses playback section information defining a playback section of the video stream, wherein each piece of copy control information indicates a restriction on recording of a video signal resulting from playback of the playback section ([0235]-[0241]; [0326] – playback section information which corresponds to the control signal determining whether or not the video signal is prohibited, thus defining a playback section of the video stream upon recording – the playback section is the whole video signal that is to be protected).

Regarding claim 6, Kori also discloses playback path information defining a playback path of the video stream, wherein each piece of copy control information indicates a restriction on recording of a video signal resulting from playback of the video stream following the playback path ([0235]-[0241]; [0326] – *playback path information which corresponds to the control signal determining whether or not the video signal is prohibited, thus defining a playback path of the video stream upon recording – the playback path is the whole video signal that is to be protected*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aridome (US 2004/0126097) and Kori et al. (US 2004/0028385 - hereinafter Kori).

Regarding claim 7, Aridome discloses a playback device for executing playback of video composed of a plurality of frame images (*Fig. 4A; [0164]-[0169]*), comprising: a read unit operable to read a video stream from a recording medium ([0165]); a frame memory ([0168]; *Fig. 7 – buffer 228*); a video decoder operable to decode the video stream so as to sequentially obtain and write the frame images on the frame memory ([0168]; *Fig. 7 – video decoder 225*); and an output unit operable to generate a video

Art Unit: 2621

signal from the frame images sequentially written on the frame memory and output the video signal ([0168]).

However, Aridome does not disclose the recording medium has a plurality of pieces of copy control information recorded thereon, and the output unit includes an assigning subunit operable to assign, to the video signal, one of the plurality of pieces of copy control information corresponding to a quality level of the video signal.

Kori discloses recording medium has a plurality of pieces of copy control information recorded thereon ([0182] – *the video signal is inherently composed of a plurality of frame images; [0187]; [0188]; [0191]; Fig. 8; [0192]; [0193]; [0326]; [0334]; [0338]*), and the output unit includes an assigning subunit operable to assign, to the video signal, one of the plurality of pieces of copy control information ([0343]; [0347]) corresponding to a quality level of the video signal ([0192]; [0193]; [0197]; [0326]; [0334]; [0338] – *SCMS or CGMS is used for normal rate copying – UCS is used for high rate copying – wherein copying rates reflect quality levels of the video signal at the output*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kori into the playback device disclosed by Aridome in order to provide and control the copy protection over the video data.

Regarding claim 8, Kori also discloses each quality level shows a resolution level of the frame images ([0192]; [0193]; [0197] – *wherein copying rates reflect quality levels at which the video signal is output that show temporal resolution levels of the frame images to be copied, which is a resolution level*), and the assigning subunit is operable

Art Unit: 2621

to assign copy control information indicating recording prohibition to the video signal of a high-resolution level ([0037]; [0039] – *illegal copying is prohibited under high-rate copying, which corresponds to a temporally high-resolution level at the output*), and copy control information indicating recording permission to the video signal of a low-resolution level ([0008]-[0012] – *either state of “00” or “10” of CGMS which is applied for low-rate copying, which corresponds to temporally low-resolution level of the signal at the output*).

Regarding claim 9, Kori also discloses a connection unit operable to establish connection with a secure recording medium (*Fig. 9 – via the recording device*); and a judgment unit operable to judge whether the secure recording medium stores therein a certificate of a right to loosen copy control ([0244]; [0245] – *contents ID that is not stored in history information management memory*), wherein the assigning subunit is operable to assign the copy control information only when the judgment unit judges that the certificate is stored ([0245]).

Claim 10 is rejected for the same reason as discussed in claim 4 above.

Claim 11 is rejected for the same reason as discussed in claim 5 above.

Claim 12 is rejected for the same reason as discussed in claim 6 above.

Claim 14 is rejected for the same reason as discussed in claim 7 above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

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